

Odisha Power Transmission Corporation Ltd.  
Bhubaneswar.



*Agenda*  
*for*  
95<sup>th</sup> Power System Operational Coordination Meeting

Date: 29.03.2016  
Venue: PTC, Chandaka.

**Agenda for 95<sup>th</sup> PSOC Meeting to be held on 29.03.2016 at PTC, Chandaka**

**Item no. 1: Confirmation of the minutes of the 94<sup>th</sup> PSOC Meeting held on 23.02.2016**

The minutes of meeting was circulated vide letter No. SGM (PS)-PI-15/2015/765<sup>(43)</sup> dated 17.03.2016 to all the members and also uploaded in the SLDC website. No comment has been received from any of the members.

*Members may offer their comments. If there is no comment, the minutes of the meeting may please be confirmed.*

**PART A**

**(List of items to be discussed for which the details are given in the subsequent parts)**

B : Grid Performance for the month of February' 2016

C.1: Implementation of Automatic Demand management Scheme

C.2: Charging of 220kV Raigarh (PGCIL)-Budhipadar line

C.3: 220 kV inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG), Keonjhar & Pandiabil S/s

C.4: Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN.

C.5: Certification through BIS as per IS 18001:2007 to all generating/ transmission units.

C.6: Replacement / Repair of meters on various locations

C.7: Dynamic data of Generator Models required in PSSE for Simulations –ERLDC

C.8: Furnishing data to CTU for TTC / ATC estimation in planning horizon

C.9: Mock Black start exercises in Eastern Region – ERLDC

D.1: Non-compliance of drawal schedule by DISCOMs

D.2: Revival of Station transformer for station auxiliary supply at Balimela HEP

D.3: Prolonged outage of transmission elements and tentative revival dates

D.4: Tripping of 400 kV Vedanta-Meramundali D/C line.

D.5: Delay in restoration of transmission elements.

D.6: Maintenance of 400 kV Indravati (OHPC)- Indravati (PG) S/C line.

D.7: Communication issues

D.8: Islanding scheme of IbTPS

D.9: Web based drawal / generation scheduling.

D.10: Implementation of Automatic Meter Reading for OPTCL-Discom interface points.

D.11: Software for Deviation charge billing.

D.12: DISCOM Issues

E.1: Commissioning status of New Transmission elements.

E.2: Energy Metering at Hydro Stations.

E.3: TTPS Issue.

E.4: Major Events in the month of February' 16

E.5: Important Grid Incidences during the month of February' 16.

E.6: Outage of major transmission Elements during the month of February' 16. (above 10 hrs).

E.7: Review of Outage Program of State Generators for the month of April' 2016.

E.8: Generation Program for the month of April' 16.

E.9: Operating procedure for Odisha System.

E.10: Anticipated power generation and demand for the month of April' 2016.

F.1: Date and Venue of the next (96<sup>th</sup>) PSOC meeting

## PART B: GRID PERFORMANCE

### Review of Grid Performance for the month of February'16.

#### (A) Frequency:

Hourly frequency variation for the month of February'16.

Month	% of time frequency remained				
	<49.00	49.00-49.70	49.70-49.90	<b>49.90-50.05</b>	>50.05
Dec'15	0.00	0.08	15.30	66.27	18.35
Jan'16	0.00	0.00	7.56	65.59	26.86
<b>Feb'16</b>	0.00	0.02	11.92	75.09	12.97

Maximum & Minimum frequency during the month of February'16.

Month	Freq (Hz)	Date	Time
<b>January'16</b>	Maximum – 50.20	20.01.16	02:00 Hrs
	Minimum – 49.80	14.01.16	08:15 Hrs
<b>February'16</b>	Maximum – 50.18	01.02.16	13:00 Hrs
	Minimum – 49.76	25.02.16	18:45 Hrs

#### (B) Grid Demand for the month of February'16.

Month	Demand		Maximum Consumption		Maximum Demand			Minimum Demand		
	MU	Avg. (MW)	MU	Date	MW	Date	Time	MW	Date	Time
Jan'16	2095	2816	70.71	30.01.16	3861	28.01.16	20:00	2117	28.01.16	14:00
<b>Feb'16</b>	<b>2083</b>	<b>2993</b>	<b>77.00</b>	<b>23.02.16</b>	<b>4021</b>	<b>23.02.16</b>	<b>20:00</b>	<b>2201</b>	<b>09.02.16</b>	<b>14:00</b>
Feb'15	1806	2688	<b>68.75</b>	<b>26.02.15</b>	<b>3613</b>	<b>26.02.15</b>	<b>20:00</b>	<b>1979</b>	<b>12.02.15</b>	<b>16:00</b>

**Members may please discuss.**

#### (C) Voltage Profile of 220 kV Buses in OPTCL system for the month of: February'16

Sl. No	S/s Name	Maximum			Minimum		
		kV	Day	Time	kV	Day	Time
1	Jayanagar	242.25	17	14:00	223.54	24	17:00
2	Theruvalli	235.03	15	13:30	206.69	19	19:00
3	Bhanjanagar	236.24	4	02:45	212.75	19	19:00
4	Chandaka	228.34	1	01:45	206.40	22	18:30
5	Narendrapur	217.71	1	02:30	170.66	22	18:30
6	Joda	239.66	7	15:00	211.22	24	19:00
7	Tarkera	235.49	1	04:00	225.74	23	18:45
8	Bhadrak	233.76	27	03:15	213.96	22	18:30
9	Paradeep	228.22	1	02:45	205.59	23	19:15
10	Budhipadar	234.97	12	13:00	223.14	24	19:00
11	Duburi(O)	233.24	1	03:00	217.37	22	18:45
12	Duburi (N)	227.30	1	02:45	211.59	22	18:30
13	Balasore	235.38	3	14:30	214.42	22	18:45
14	Meramundali	228.39	4	02:45	219.62	24	18:30
15	Bidanasi	234.57	18	03:15	219.44	22	18:45
16	Katapalli	235.38	12	13:15	210.73	24	19:00
17	Nayagarh	236.01	4	02:45	210.26	10	18:00
18	Mendhasal	231.97	26	22:45	210.32	11	18:30
19	Bolangir	236.76	12	10:00	193.81	24	18:30
20	Barkote	235.55	1	03:00	225.22	23	18:30
21	Laxmipur	239.48	15	13:45	217.60	19	19:15

The maximum Voltage of 242.25 kV occurred at Jaynagar 220 kV bus while Narendrapur, 220 kV buses have experienced the minimum Voltage of **170.66** kV. Bus Voltages at Samgara and Lapanga could not be incorporated due to non availability of energy meter in those S/Ss.

Members may discuss.

**(D) Loading of 220/ 132 kV Auto at 220 kV S/Ss in OPTCL system for the month of Feb-16  
AUTO TRANSFORMER LOADING FOR THE MONTH OF FEBRUARY'2016**

Name of the 220 kV Sub-Station ( Feeding Sub-stations/Feeders )	Capacity  MVA	Drawal details						REMARKS
		Maximum			Minimum			
		MW	Day	Time	MW	Day	Time	
<b>JAYANAGAR 220/132 KV.</b> {Damanjodi(NALCO), Traction S/Ss, Tentulikhunti, Sunabeda, Jayanagar}	1x160	91.96	19	8:00	16.68	29	14:45	
	1x160	91.64	18	9:00	17.12	29	15:45	
<b>THERUVALLI 220/132 KV.</b> {Theruvalli, IMFAL(I), JK(I), Junagarh, Kesinga,Powmex(I), Rayagada, }	1x100	70.88	13	20:15	2.96	15	14:30	Rayagada & Paralakhemundi can be fed from Machhkund system.
	1x100	66.72	13	20:15	3.44	15	14:15	
<b>NARENDRAPUR 220/132KV</b> { Narendrapur, NarendrapurTr, Berhampur, Chhatrapur, Ganjam, Balugaon, Digapahandi, Mohana.}	1x160	125.46	3	15:00	50.84	4	13:15	
	1x160	109.64	21	19:45	38.05	3	14:45	
	1x100	NOT AVAILABLE						
<b>BHANJANAGAR 220/132 KV</b> { Bhanjanagar, Aska, Phulbani, Ganjam, Chatrapur}	1x160	UNDER SHUT DOWN						
	1x160	130.68	8	18:30	20.76	27	16:30	
<b>CHANDAKA 220/132 KV</b> { Chandaka, Bhubaneswar, Nimapada, Ransinghpur, Puri,Kesura, Kaipadar Tr. }	1x100	68.84	26	18:45	34.68	7	15:00	
	1x160	121.20	26	19:00	60.72	7	15:15	
	1x100	75.28	22	19:15	37.08	7	15:15	
	1x160	116.16	23	19:00	57.60	7	15:15	
<b>BIDANASI 220/132 KV</b> {Bidanasi, Khurda }	1x160	NOT AVAILABLE						
	1x100	36.84	20	18:30	7.12	16	14:45	
	1x100	40.84	17	18:30	6.16	27	20:15	
<b>TTPS 220/132 KV</b> { Chainpal, FCI (I), Angul, MCL Nandira(I), Rairakhole,Boinda,Kamakhyanagar, Kalarangi,Nuapatna, Choudwar }	1x160	UNDER SHUT DOWN						Auto-I under shutdown.
	1x160	118	8	1:00	0	1	10:00	
<b>MERAMUNDALI 220/132 kV</b> {Meramundali Traction, Dhenkanal, Navchrome(I), Hind Metal, Aarti,BRG}	3x100	53.08	24	18:00	13.28	18	14:00	
		52.48	24	18:00	13.08	18	14:00	
		50.80	24	18:45	12.4	18	14:45	
<b>DUBURI 220/132 KV</b> {Duburi, Bamnipal(I), BRPL, MESCO, Jajpur Road, Kalarangi, Jajpur Town}	3x100	54.44	18	18:45	3.28	1	2:15	Auto-II under shutdown.
		UNDER SHUT DOWN						
		52.84	18	18:45	3.16	1	2:15	
<b>JODA 220/132 KV</b> { Joda, Tensa, FAP(I), Bolani(I), Nalda Tr.,Polasponga, *Rairangpur, Bhalulata traction}	3x100	NOT AVAILABLE						*** - Alternate P/S from KucheI.
		NOT AVAILABLE						
		NOT AVAILABLE						
<b>BALASORE 220/132 KV</b> { Balasore, Birla Tyre(I), Ispat Alloy(I), Jaleswar, Jaleswar(T)}	2x160	120.88	18	19:45	3.28	3	8:30	
		120.52	18	19:30	7.12	3	11:00	
<b>BUDHIPADAR 220/132 KV</b> { Jharsuguda, Jharsuguda Tr, Cemco(I), MCL, Sundergarh,Brajarnagar, Rajgangpur}	2x160	92.08	19	20:15	5.08	14	11:00	
		91.28	19	20:15	5.72	14	11:00	
<b>TARKERA 220/132 KV</b> { Rourkela, Rourkela Tr.,RSP(I), Chhend , Adhunik Metal, Rajgangpur, OCL(I), Rajgangpur Tr.}	4x100	76.56	14	12:30	9.16	26	16:30	
		75.84	17	19:15	9.88	26	16:15	
		57.00	15	18:30	9.80	26	16:15	
		73.80	17	19:00	9.88	26	16:15	
<b>KATAPALI 220/132 KV</b> {Chipilima,Bargarh, ACC,Sonepur & Katapali area load.}	1x100	57.16	9	10:15	3.40	2	17:30	Supported by Burla & Chipilima power.
	1x100	57.36	9	10:00	3.64	2	17:15	
	1x160	NOT AVAILABLE						
<b>BHADRAK 220/132 KV</b> {Bhadrak area load, Bhadrak(T),Soro, FACOR (I), Dhamra Port}	3x100	62.36	16	19:45	4.56	26	21:00	
		40.16	28	18:30	6.68	2	10:00	
		NOT AVAILABLE						
<b>PARDEEP 220/132 KV</b> { Paradeep, Kendrapada, Pattamundai, Chandikhola, Cuttack, Jagatsinghpur, Phulnakhara}	1x160	110.24	17	19:30	46.52	5	14:00	
	1x100	67.24	17	19:30	5.20	18	9:45	
	1x50	NOT AVAILABLE						
<b>BOLANGIR (SADAIPALLI) 220/132 KV</b> { Bolangir, Patnagarh, Sonepur, Saintala, Khariar, Barpalli }	2x160	64.16	2.00	9:15	24.72	2	13:30	
		55.28	10.00	18:45	15.00	26	18:45	
<b>Lapanga</b>	1x160	NOT AVAILABLE						
	1x160	NOT AVAILABLE						
<b>Mendhasal</b>	1x100	NOT AVAILABLE						
<b>Samangara</b>	1x100	NOT AVAILABLE						

In the last meeting it was deliberated that procurement of meters was under process.

**CGM (O&M) may please deliberate the status.**

**(E) DISCOM Drawal up to the month of February'16**

Name of DISCOM	Month	Approved Energy Drawal Prorated for the month (MU)	Scheduled Energy (MU)	Actual Energy Drawal (MU)	Open Access Import Schedule (MU)	Net Energy Drawal (MU)	Overdraw (MU)
		1	2	3	4	5=(3-4)	6=(5-2)
CESU	April'15	721.644	676.468	700.852	3.892	696.96	20.492
	May'15	745.699	741.683	803.331	4.582	798.749	57.066
	June'15	721.644	680.782	731.303	4.094	727.209	46.427
	July'15	745.699	682.482	747.814	4.552	743.262	60.78
	Aug'15	745.699	730.38	787.091	1.844	785.247	54.867
	Sept'15	721.644	668.276	716.483	1.247	715.236	46.96
	Oct'15	745.699	729.776	733.265	3.606	729.659	-0.117
	Nov'15	721.644	607.136	636.447	4.449	631.998	24.862
	Dec'15	745.699	572.148	596.675	4.497	592.178	20.03
	Jan'16	745.699	579.168	586.311	4.414	581.897	2.729
<b>Feb'16</b>	<b>697.589</b>	<b>605.229</b>	<b>633.293</b>	<b>5.129</b>	<b>628.164</b>	<b>22.935</b>	
WESCO	April'15	604.11	569.419	692.842	124.592	568.25	-1.169
	May'15	624.247	608.011	742.524	132.217	610.307	2.296
	June'15	604.11	571.331	677.972	107.811	570.161	-1.17
	July'15	624.247	550.147	716.622	102.587	614.035	63.888
	Aug'15	624.247	571.706	700.166	107.046	593.12	21.414
	Sept'15	604.11	530.99	668.478	96.912	571.566	40.576
	Oct'15	624.247	550.739	732.87	124.713	608.157	57.418
	Nov'15	604.11	524.758	655.613	116.562	539.051	14.293
	Dec'15	624.247	489.838	656.939	132.988	523.951	34.113
	Jan'16	624.247	542.391	677.377	123.847	553.53	11.139
<b>Feb'16</b>	<b>583.973</b>	<b>511.488</b>	<b>646.392</b>	<b>104.372</b>	<b>542.02</b>	<b>30.532</b>	
NESCO	April'15	431.507	412.235	432.73	17.888	414.842	2.607
	May'15	445.89	452.964	475.162	19.32	455.842	2.878
	June'15	431.507	428.938	458.649	23.262	435.387	6.449
	July'15	445.89	429.905	462.235	29.387	432.848	2.943
	Aug'15	445.89	460.083	495.915	31.255	464.66	4.57702
	Sept'15	431.507	417.33	486.661	38.715	447.946	30.616
	Oct'15	445.89	449.492	493.603	41.506	452.097	2.605
	Nov'15	431.507	380.024	443.309	68.066	375.243	-4.781
	Dec'15	445.89	382.554	437.523	64.787	372.736	-9.818
	Jan'16	445.89	419.675	500.987	80.535	420.452	0.777
<b>Feb'16</b>	<b>417.123</b>	<b>415.908</b>	<b>464.245</b>	<b>52.968</b>	<b>411.277</b>	<b>-4.631</b>	
SOUTH CO	April'15	281.096	275.391	264.684	0	264.684	-10.707
	May'15	290.466	277.641	285.102	0	285.102	7.461
	June'15	281.096	253.054	263.675	0	263.675	10.621
	July'15	290.466	282.015	285.292	0	285.292	3.277
	Aug'15	290.466	285.264	290.409	0	290.409	5.145
	Sept'15	281.096	252.453	257.882	0	257.882	5.429
	Oct'15	290.466	279.951	281.598	0	281.598	1.647
	Nov'15	281.096	254.482	260.385	0	260.385	5.903
	Dec'15	290.466	258.079	265.705	0	265.705	7.626
	Jan'16	290.466	262.208	265.313	0	265.313	3.105
<b>Feb'16</b>	<b>271.726</b>	<b>269.423</b>	<b>265.941</b>	<b>9.81</b>	<b>256.131</b>	<b>-13.292</b>	

*The figures are as per EBC data. Energy drawal by SOUTHCO are excluding of energy consumed by NALCO at Damanjodi and IMFA at Theruvali.*

**Members may please discuss.**

**(F) Energy Generation / Import during the month of February'16**

Source of Power	Energy (MU)
Thermal (TTPS+IB)	466.326
OHPC Stations including Machhkund share	246.760
IPP & CGP Support	674.022
ISGS drawal	695.962
<b>TOTAL</b>	<b>2083.070</b>

**(G) Drawal of Machhakund Power**

The drawal of Machhakund power up to the month of February'16 are as detailed:

Month	Total Generation		Odisha Drawal		AP Drawal	
	MU	MW	MU	MW	MU	MW
April'15	60.537	84.08	26.706	37.09	31.114	43.21
May'15	38.508	51.76	17.300	23.25	19.478	26.18
June'15	24.556	34.11	8.927	12.40	14.345	19.92
July'15	52.651	70.77	24.036	32.31	26.266	35.30
August'15	60.393	81.17	29.393	39.51	28.749	38.64
September'15	43.426	60.31	18.045	25.06	23.316	32.38
October'15	54.825	73.69	25.288	33.99	27.537	37.01
November'15	52.776	73.30	23.079	32.05	27.339	37.97
December'15	51.372	69.05	26.510	35.63	22.520	30.27
January'16	50.821	68.31	27.415	36.85	21.077	28.33
February'16	<b>61.299</b>	<b>88.06</b>	<b>28.501</b>	<b>40.94</b>	<b>30.314</b>	<b>43.55</b>

**In the last meeting it was decided that:**

Shift in charge of Jayanagar S/S shall be instructed to reduce load in case of over drawal, to avoid hand tripping of feeder from Machhakund end.

OHPC shall persuade Machhakund authority to make the 2<sup>nd</sup> bay functional for contingency requirement.

Southco to take follow up action for early inspection of newly constructed 33 kV Akhusing-Gumuda feeder.

Gridco to write Machhakund authority, to compensate the quantum of energy not drawn by Odisha by allowing over drawal.

CGM (Telecom) stated that offer from M/s Chemtrol for providing RVDU at Jayanagar control room is awaited for want of OSI licenses.

**SLDC/ CGM (Const) / CGM (Telecom) / OHPC/ Southco Utility may deliberate the status.**

**(H) Under Frequency Relay operation in OPTCL System during the month of February'16.**

Since, the frequency had never gone beyond the lowest setting of UFR, there was no UF Relay operation occurred during the month of **February'16**.

**Members may note**

## **PART C – Issues raised in 119<sup>th</sup> OCC meeting of ERPC held on 18.03.16**

### **C.1: Implementation of Automatic Demand management Scheme**

OPTCL vide mail dated 24.02.2016 pointed that Hon'ble CERC vide their order dated 31.12.2015 passed in Sou-motu Petition No.- 5/SM/2014 in the matter of non-compliance of Regulation 5.4.2 (d) of IEGC directed all Respondents (SLDCs) for implantation of ADMS in their respective control area. CERC have allowed dead line till 30.06.2016 to the Respondent for implementation of ADMS. Failing which they will be liable for action under Section 142 of the Act.

OCC may provide / guide the mechanism / logic for implementation of ADMS in the state system to the constituents.

DVC and West Bengal stated that they are in the process of development of the scheme for their respective area. ERPC advised to develop the ADMS in the State control area. The Discoms may be advised to development ADMS for their respective control area. OPTCL may take necessary action for implementation of the same.

**O&M / Discoms / SLDC may deliberate**

### **C.2: Charging of 220 KV Raigarh (PGCIL)- Budhipadar line**

The issue was discussed in 117<sup>th</sup> OCC meeting followed by discussion in 32<sup>nd</sup> TCC

OPTCL informed in the 32<sup>nd</sup> TCC that 60 km line belongs to them and some details such as protection setting, meter and communication details are needed to fill B1 to B5 formats.

TCC advised OPTCL to coordinate with Powergrid and submit the formats and advised Powergrid to provide the relevant information to OPTCL.

Subsequently, ERPC has taken up the issue with WRPC, OPTCL & Powergrid to charge the above line.

WRPC vide letter dated 08.03.2016 has requested PGCIL and CSPTCL to interact with OPTCL representatives for charging the line.

**CGM (O&M) may deliberate the status.**

### **C.3: 220 kV inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG), Keonjhar & Pandiabil S/s**

PGCIL has already commissioned the 2 X 315MVA 400/220kV Bolangir S/s by LILOing of 400kV Meramandali-Jeypore S/C line and 400/220 kV Keonjhar S/s with an objective of supplying power from ER grid to its adjoining areas in Odisha.

In 119<sup>th</sup> OCC, OPTCL updated the completion schedule of inter-connecting system as follows:

<b>Sl. No.</b>	<b>Name of the transmission line</b>	<b>Completion schedule</b>
<b>1.</b>	<b>2 X 315MVA 400/220kV Bolangir S/s</b>	
a.	LILO of one circuit of Sadeipalli-Kesinga 220 kV D/C line at Bolangir S/S.	7 out of 14 completed. Severe ROW problem. Negotiation under progress.
b.	LILO of one circuit of Katapalli-Sadeipalli 220 kV D/C line at Bolangir S/S.	All work completed. ERLDC agreed to charge the line without PLCC. OPTCL shall coordinate with Powergrid.
<b>2.</b>	<b>400/220 kV Keonjhar S/S.</b>	
a.	Keonjhar (PG)-Keonjhar (OPTCL) 220 kV D/C line	Work order expected to be issued by Feb-16
b.	Keonjhar (PG)-Turumunga (OPTCL) 220 kV D/C Line.	Yet to be awarded
<b>3.</b>	<b>400/220 kV Pandiabil Grid S/s</b>	
a.	Pratapsasan(OPTCL)-Pandiabil (PG) 220 kV D/C line	It will take 1 year for completion.
b.	LILO of one circuit of Atri-Puri (Samangara) 220 kV D/C line at Pandiabil (PG)	After commissioning Pandiabili S/S by Powergrid.

**CGM (Const) / CGM (O&M) may please update the status.**

#### **C.4: Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN.**

The activity of the preparation of Crisis Management Plan for countering the cyber attacks and its implementation including the Mock Drills, audits etc. is being monitored by CEA regularly in line with crisis management plant of Ministry of Power. Power Utilities (including generation, transmission & distribution utilities) of eastern region are to furnish regularly, the updated status to Chief Engineer, Distribution Planning & Development Division, CEA.NTPC communicated their activity of the preparation of Crisis Management Plan for countering the cyber attacks vide letter dated 2nd August, 2013.

In 113th OCC, Member Secretary informed that during interaction with consultants of Grid Study Committee, NLDC agreed that they will plan for conducting workshops on crisis management plan for Cyber Security and few workshops will also be held in Eastern Region.

In the last meeting, CGM (IT) stated that the draft report has been prepared, which has to be finalized by the consultant. After finalizing the report, a workshop shall be organized by IT.

**CGM (IT) may please deliberate the status.**

#### **C.5: Certification through BIS as per IS 18001:2007 to all generating/ transmission units.**

In 84<sup>th</sup> OCC meeting all constituents were requested to interact with BIS with intimation to ERPC and get certified as per CEA direction.

In 85<sup>th</sup> OCC, NTPC informed that NTPC-Farakka has been certified with IS 18001. Other constituents including OHPC requested to interact with BIS with intimation to ERPC and get certified as per CEA direction. The matter is getting reviewed by highest authorities with top priority.

In the last meeting it was decided that BIS shall be reminded again. OPTCL may take the help of any consultancy agency for the above purpose.

**CGM (O&M) may deliberate the status.**

#### **C.6: Replacement / repair of meters on Various Locations**

##### **i. Replacement/Repair of Defective meter at Mendhasal – SLDC, Odisha**

Meter at Mendhasal (GRIDCO) end of Mendhasal (GRIDCO) – Baripada (PG)- I is defective since more than two months. SLDC, Odisha vide mail dated 05.01.2016 have requested for early replacement / repair of meter at Mendhasal.

In the last meeting SLDC stated that the meter at Mendhasal end is functioning at present. Gridco may raise the issue for adjustment of the reactive power flow recorded in the past period, during which the meter was defective.

**GRIDCO / O&M may please deliberate**

##### **ii. Installation of New SEMs in B/C panels at Joda Grid S/s of OPTCL - OPTCL**

OTPCCL vide mail dated 30.12.2015 have requested for installation of new SEMs at B/C panel at their Joda GSS for 220kV Joda- Ramchandarpur & Joda – Jindal Interstate tie lines.

In the 117<sup>th</sup> OCC meeting Powergrid informed that required meters are already installed and SEM for bus coupler is not required.

SLDC deliberated in the OCC that, since there is no line CT, installation of meter in the B/C bay was sought for.

**CGM (O&M) may please discuss**



### **C.7: Dynamic data of Generator Models required in PSSE for Simulations – ERLDC**

To carryout proper simulation studies in PSSE, actual generator parameters are required as incomplete or incorrect modeling of generator may not give valid simulation result. Hence all the generating companies are requested to furnish data for generator, exciter, governor, PSS of their all generating units in the format.

In 114<sup>th</sup> OCC, the house was informed that the formats are available at ERPC website.([www.erpc.gov.in](http://www.erpc.gov.in))

OCC advised all the generating utilities to submit the relevant information as per the format.

**OHPC / OPGC/ TTPS / CGPs may deliberate.**

### **C.8: Furnishing data to CTU for TTC / ATC estimation in planning horizon**

CTU vide letter dated 08/01/2016 requested all states to furnish their respective bus-wise projected demand for 2017-18 and 2018-19 and also intra state transmission system data (220 kV and above) to work out ATC / TTC in planning horizon. A reminder in this regard was further sent by CTU to all states on 04/02/2016.

**O&M may deliberate.**

### **C.9: Mock Black start exercises in Eastern Region – ERLDC**

Sl. No.	Name of Hydro Station	Schedule (1 <sup>st</sup> )	Tentative Date	Schedule (2 <sup>nd</sup> )	Tentative Date
1	U.Kolab	Last week of May, 2015	Done on 16/07/2015	Last Week of January, 16	March,2016
2	Rengali	2 <sup>nd</sup> week of June 2015	Done on 09/02/2016	Last Week of November, 15	Done on 09.02.2016
3	U. Indravati	3 <sup>rd</sup> week of June 2015	Done on 16/07/2015	2 <sup>nd</sup> week of February 2016	March,2016
4	Balimela	1 <sup>st</sup> week of November,15	Done on 24/11/2015	1 <sup>st</sup> week of March 2016	Done on 21 <sup>st</sup> March, 2016
5	Burla	Last week of July,15	Done on 19/01/2016	Last week of February,2016	

During black start exercise of Balimela unit, it is observed that a considerable time was taken to bring the black started unit to the bus, which is not solving the purpose of the exercise to acquaint the operators for quick restoration in case of system black out.

**SLDC / O&M / OHPC may deliberate.**

## **PART-D – Operational Issues**

### **D.1: Non-compliance of drawal schedule by DISCOMs**

Non compliance of drawal schedule messages issued to Discoms during the month of **February'16:**

Sl. No	Name of Discom	No. of message issued	Over drawal (MU)
1	CESU	3	22.935
2	WESCO	5	30.532
3	NESCO	6	-4.631
4	SOUTHCO	1	-13.292
	<b>Total</b>	<b>15</b>	<b>35.544</b>

It is noticed that WESCO had overdrawn to the tune of 30.532 MU followed by CESU to the tune of 22.935 MU.

**SLDC/ Discoms may please deliberate.**

**D.2: Revival of Station Transformer for Station Auxiliary supply at Balimela HEP.**

It was suggested in earlier meetings for revival of station supply for Balimela HEP from Balimela Grid S/S.

In the last meeting, OHPC stated that revival of station supply from Balimela 220/33 kV S/S will be done by end of March' 2016.

**OHPC may update.**

**D.3: Prolonged outage of transmission elements and tentative revival dates**

The tentative revival dates of transmission elements are updated in the last meeting are as follows:

Sl.No	me of transmission element	Reason of outage	Probable date of revival
1	220kV Jayanagar-Theruvali ckt-III breaker	Breaker already erected but not commissioned. Isolator problem	January'2016
2	132 kV Jayanagar-Sunabeda line	For conversion to Double ckt	By end of March'2016.
3	220 kV TTPS-Joda ckt-I	Replacement of conductor	April'2016
4	220 kV Meramundali-Bhanjanagar ckt-I	Replacement of conductor	April'2016

Outage of the 220 kV Meramundali-Bhanjanagar ckt-I results overloading of Mendhasal ICTs, which may aggravate further during summer. The line may be restored early.

**C.G.M. (O&M) may please update the status.**

**D.4. Tripping of 400 kV Vedanta-Meramundali D/C line.**

It is noticed that in case of tripping of 400 kV Vedanta-Meramundali ckt-I, ckt –II of the said line also trips at Vedanta end causing evacuation problem of Vedanta IPP generation. Outage of 600 MW (Vedanta) generation is also creating load generation mismatch and the State is forced to overdraw power from the Grid, which lead to heavy financial implications to Gridco as well as violation of grid discipline. M/S Vedanta should examine their bus configuration and rectify the problem. Also there is no carrier inter tripping arrangement for the above line. Frequent tripping of the line is also noticed. It is to mention here that the lines have been charged recently i.e. during last day of December-15.

**M/S Vedanta & O&M may deliberate.**

**D.5. Delay in restoration of transmission elements.**

It is noticed that some of the Grid S/Ss are taking considerable time for restoration of transmission lines after tripping. On enquiry, it is learnt that the delay is due to manual spring charging, as automatic spring charge mechanism is not functioning properly. O&M may identify such breakers and take initiative to rectify.

**O&M may deliberate**

**D.6. Maintenance of 400 kV Indravati (OHPC)- Indravati (PG) S/C line.**

Indravati(OHPC)-Indravati(PG) 400 kV S/C line was being maintained by Powergrid since commissioning of the line. At present Powergrid is insisting OHPC / OPTCL for maintenance of the said line. As per Powergrid's statement, the line and bay at PGCIL end belongs to the then OSEB. A meeting was convened between Powergrid, OPTCL, Gridco and SLDC to resolve the ownership dispute. Powergrid vide their letter dated 19.03.2016, addressed to CGM (O&M) also indicated the same and requested OPTCL to take up the maintenance work. The line was tripped at PG end due to blasting of R-phase CB. OHPC and OPTCL may verify the records and resolve the issue.

**Members may discuss.**

## D.7: Communication issues

### (i) Installation of communication equipment by CGPs / Industries.

The status of data communication from CGPs as deliberated in the last meeting is as follows

Sl. No	Name of CGP	Present status
1	M/s IFFCO, Paradeep	Outdoor commissioning work completed. RTU was locally tested. After replacement of the faulty CVT, data will be integrated.
2	M/s MSP Mettalicks	PLCC / RTU installed. Database has already been prepared by OPTCL. Final RTU integration with OPTCL system by the vendor is awaited.
3	M/s NINL, Duburi	M/s NINL has requested for Scheme, BOQ for PLCC / SCADA, which has been forwarded by OPTCL. No action has been taken by NINL so far.
4	M/s Rohit Ferro tech	PLCC established and inspection by Telecom Engineers completed. Database has already been prepared by OPTCL.
5	M/s Vedanta Ltd. (IPP), Jharsuguda	Generators data remains suspect most of the times.

In the last meeting it was decided that GCC, OPTCL may file a case before the OERC through RT&C wing of OPTCL against those CGPs not complying the data communication provisions with SLDC.

**GCC / O&M / RT&C/ C.G.M. (Telecom.) may please deliberate.**

## D.8. Islanding Scheme of Ib TPS

The islanding scheme for IbTPS has already been commissioned but not functioning due to non-incorporate the trip commands to the breakers at Budhipadar from the Islanding Relay. This has already been discussed in the 81<sup>st</sup> PSOC meeting, wherein Telecom wing of OPTCL assured to complete the optical fibre link, provided IbTPs allow for working in their premises. Ib TPS had also agreed to allow them. The link is yet to be completed yet.

The status of work deliberated in the last meeting by GGM (Telecom) is as detailed.

- All works work for interconnection to trip the identified feeders at Budhipadar grid completed.
- Sending of direct trip command to Tarkera for tripping of 132 kV Tarkera-Rajgangpur ckt-I & II is done and tested.
- Sending of command to ramp down generation for unit-I has been tested. Testing for unit-II is yet to be done by OPGC.
- Ramping down through governor, assigned to M/S BHEL will take 1- 2 week of time.
- OPTCL had requested OPGC to fix a date for simulating the test without effecting power flow, for which no response has been received.

Ib TPS stated that they will intimate the date

**C.G.M. (Telecom) / Ib TPS may please update the status.**

## D.9: Web based drawal / generation scheduling.

SLDC is going to implement web based drawal / generation scheduling for Dist. Utilities and State generating stations including IPPs and CGPs soon. A demo has been organized on 29.07.15. In the last meeting, CGM (IT) stated that, web based generation scheduling module for State generating stations has been already been developed by IT wing. Modules for Discom and CGP / IPP shall be made available before the next PSOC meeting. After approval by the stake holders the same shall be go live from September'15. All Users were requested to forward their respective schedule in the prescribed format.

In the last meeting CGM (IT) stated that final demo will be arranged by end of February'2016.

**CGM (IT) / SLDC may deliberate.**

#### **D.10: Implementation of Automatic Meter Reading for OPTCL-Discom interface points.**

The work for Automatic Meter Reading (AMR) for all the interface points is in progress.

In the last meeting all Discoms have agreed to display the meter data on the dashboard required for analysis purpose.

In the last meeting CGM (IT) stated that from 1<sup>st</sup> March onwards the AMR shall be made “Go live”. Data will be available after one hour lapses of time.

CGM (IT) stated that AMR data for six types of meters has been mailed to GM (SLDC) for checking and acceptance. Action will be taken after acceptance of the data.

GM (SLDC) stated that required manpower is not available at SLDC for checking the data. Sr. GM (PS) stated that requisition for posting of executives at SLDC has been placed before the HR wing.

**SLDC / CGM (IT) may deliberate.**

#### **D.11: Software for Deviation charge billing.**

Hon’ble OERC may notify “Intra State Deviation settlement and related matters” Regulation at any time. For implementation of the regulation, required software for Deviation Charge billing need to be developed and tested. CGM (IT) may take necessary steps for development of the software.

In the last meeting CGM (IT) stated that requirement for development of deviation charge billing may be furnished by SLDC. The software shall be developed by outside agency, as Infosys may take long time.

**CGM (IT) may deliberate the status**

#### **D.12: DISCOM Issues**

##### **CESU**

A. In the last meeting, it was decided that CESU shall approach O&M through a meeting to resolve bilateral issues. The discussion in the meeting may be placed in the next PSOC meeting.

B.

- (i) Mismatch of SCADA drawal with the billing meter data to the tune of 24 MU during February’16.
- (ii) Fixed data indicated on dashboard may be converted to variable for accurate drawal display.
- (iii) Interruption of RVDU data.
- (iv) Mismatch in dashboard and RVDU data.
- (v) Exploring of AMR on real time basis.

**CGM (Telecom) / SLDC / CESU may please deliberate**

##### **NESCO**

NESCO is insisting SLDC for billing of Cross subsidy surcharge to M/s JSPL, Barbil for importing power from its CGP at Angul. There is no such provision in the Act for levy of cross subsidy surcharge to the industry importing power from its own CGP. This has been intimated several times to NESCO.

**NESCO may deliberate / Members may discuss**

## **PART E: OPERATIONAL PLANNING**

### **E.1: Commissioning status of New Transmission elements.**

The status of commissioning of new transmission elements is as follows:

<b>Sl. No</b>	<b>Transmission element details</b>	<b>Present Status</b>
1	Commissioning of 220 kV Jayanagar-Jeypore 2 <sup>nd</sup> DC line	Work has already been started. Expected to be completed by June 2016.
2	Commissioning of 400 kV Meramundali-Mendhasal 2nd ckt	Line is ready and shall be charged after commissioning of 3 <sup>rd</sup> ICT at Mendhasal, which is under progress. ICT is at BHEL factory
3	Commissioning of 220 kV Bidanasi-Cuttack line	Work in progress and expected to be completed by March 2016.
4	Commissioning of 220/132 kV Cuttack S/S	Work in progress and expected to be completed by March 2016.
5	Commissioning of 132 kV Baripada (PG)-Jaleswar line	Work has already been started, which will be completed by June 2016.
6	Commissioning of 220/132 kV Kesinga S/S	Work under progress. Expected by September 2016.

Status of Discom's action plan for power drawal from the S/Ss commissioned / expected to be commissioned in near future.

<b>Sl. No</b>	<b>Name of the sub-station</b>	<b>Probable month of commissioning</b>	<b>Name of DISCOM</b>	<b>Action taken by Discoms</b>
1	132/33kV, 2x20 MVA Khajuriakota	March'16	CESU	Action being taken
2	220/33kV, 2x20 MVA Banei	Dec'16	WESCO Utility	Stayed by Court.
3	132/33kV, 2x20 MVA Padmapur	Charged	WESCO Utility	Line is ready
4	132/33kV, 2x20 MVA Udala	Dec-16	NESCO Utility	Line existing

In the last meeting

CESU stated that action is being taken for construction of 33/0.4 kV S/S at Mendhasal to avail power supply for Mendhasal area.

WESCO stated that diversion of 11 kV lines from Jharusuguda S/S will be done soon.

**All DISCOMS may update the status / CGM(O&M) & CGM(Const.) may please deliberate.**

### **E.2: Energy Metering at Hydro stations.**

Energy meters have already been installed at all hydro stations. Billing for all OHPC stations, except Upper Kolab, is being done from the newly installed energy meters. The energy meters at Upper Kolab are have been rectified in the mean time.

In the last meeting OHPC stated that Upper Kolab and Balimela PH meters are showing error. Mismatch noticed at both ends metering data of Burla-Chipilima Tie line. Rengali-TTPS feeder meter is not functioning. The meter data can be considered for billing purpose only after rectification of all defects. OHPC has already written to CGM (O&M) in this regard. It was decided that O&M shall take up the matter with the vender for rectification of energy meters.

**GRIDCO / OHPC / SLDC may please deliberate.**

### **E.3: TTPS Issue.**

#### **Implementation of Feeder Metering**

In the earlier PSOC meeting, TTPS deliberated that all the meters were tested & calibrated by the STL on 09.10.2015. The 132kV CTs for TTPS-Duburi-1 have been replaced. Further, as per the PPA dated 08.03.1995, the energy meters are to be installed at GT end. Since the meter locations will be shifted to feeders, the corresponding clause in the PPA is required to be amended. Accordingly, the proposal has been sent to the competent authority of NTPC for approval.

TTPS in their letter No.045/GGM/TTPS, Dated. 20.11.2015 addressed to CGM (PP) Gridco pointed out that, as per clause 7(1), 1<sup>st</sup> proviso of CEA (Installation and operation of Energy meters) Regulation, 2006 as amended in 2010 “ for existing stations the location of Main, Check and Standby meters shall not be changed unless permitted by the Authority”.

In the present case, for the first time, energy meters have been installed at the interface points, which should have been installed earlier, without changing the position of the existing meters. As such the regulation as mentioned by TTPS is not applicable. However the existing meters will be treated as standby meters.

In the 93<sup>rd</sup> PSOC meeting, GRIDCO stated that, in response to the letter of GRIDCO, CEA has sought for some information such as location of Main, Check and Standby meters. TTPS was requested to comply those queries. OPTCL may take action for installation of feeder meters.

In the 94<sup>th</sup> PSOC meeting TTPS stated that the reply has already been sent to CEA. DGM (O&M), Meramundali stated that action has been taken for installation of feeder meters at TTPS.

**GRIDCO / OPTCL/ TTPS / SLDC may please deliberate.**

### **E.4: Major Events in the month of February’16**

No report of major events has been received during the month.

### **E.5: Important Grid Incidences during the month of February’16.**

(i) On 24.02.2016 at 15:30 hrs, 400 kV New Duburi-Mendhasal Ckt-I tripped only at New Duburi end on ‘R’ ph, Zn-II and breaker failure protection. Simultaneously 400 kV Meramundali-Mendhasal Ckt tripped at both ends. (At Meramundali on ‘R’ ph to E/F, At Mendhasal-D/P, Zn-I, ‘R’ ph to E/F, dist-10.1 km)

(ii) On 25.02.2016 at 12:30 hrs, 400 kV Meramundali-Vedanta IPP Ckt-I tripped at both ends. (At Meramundali on ‘R’ ph to ‘B’ ph, dist-357.8 km. At Vedanta-SOTF). 400 kV Meramundali-Vedanta IPP Ckt-II tripped only at Vedanta end on SOTF. # 2 at Vedanta tripped.

(iii) On 29.02.2016 at 15:52 hrs, 400 kV Meramundali-Mendhasal Ckt tripped at both ends. (At Meramundali-D/P, ‘R’ ph, E/F, dist-95.4 km At Mendhasal-D/P, Zn-I, ‘R’ ph to E/F)

### **E.6: Outage of major transmission Elements during the month of February’16. (above 10 hrs).**

Outage of major transmission elements above 10 hours during the month of February-16 is as detailed.

Sl No	Transmission lines	Tripping Dt/time	Restoration Dt/time	Reason
1	132 kV Mohana-Akhusing Ckt	13.02.16 15:49	14.02.16 09:33	Tree fell on line between Loc. No-288 and 289.
2	220 kV Narendrapur-Atri-Mendhasal Ckt	26.02.16 22:36	28.02.16 15:25	‘R’ ph jumper snapped at Loc. No-496 and ‘R’ ph insulator snapped at Loc. No-497, 498 and 502.

**C.G.M. (O&M) may please deliberate.**

**E.7: Review of Outage Program of State Generators / Transmission elements for the month of April'2016:**

Tentative Outage programme for State Generators for the month of **April'2016** are as follows:

Sl.	Station	Unit	Period	Remarks
1	Burla	# 1 # 5 # 6	05.03.16 to 31.03.16 25.02.16 to 22.03.16 17.02.14 to continue	Gov. oil pump failure Annual Maintenance Programming for R, M & U
2	Chiplima	#3	15.02.14 to continue	Programming for R, M &U
3	Balimela	# 1 # 4 # 8	31.01.13 to continue 05.04.16 to 30.04.16 02.03.16 to 04.04.16	TGB problem and started R,M & U Annual maintenance Annual maintenance
4	Upper Kolab	# 1	29.07.15 to 17.05.16	Capital Maintenance
5	Rengali	# 3	28.03.16 to 27.04.16	Annual maintenance
6	Upper Indravati	# 3	23.11.15 to 31.05.16	Capital Maintenance

**OHPC / SLDC may deliberate.**

**E.8: Generation Program for the month of April'16.**

Generation schedule for the month of April'16 furnished by OHPC are given below.

Name of Hydro Gen. Station	Generation Programme (MW)		Reservoir Level as on 15.03.15	Reservoir Level as on 15.03.16	MDDL	High Flood Reservoir Level
	April'16 (1 <sup>st</sup> fortnight)	April'16 (2 <sup>nd</sup> fortnight)				
HPS-I, Burla	30	30	617.79ft	617.00ft	590 ft.	630 ft.
HPS-II, Chipilima	20	20	-	-	-	-
Balimela	110	110	1499.50ft	1482.90ft	1440 ft.	1516 ft.
Rengali	45	45	120.32mt	116.76mt	109.72m	123.5 mtr.
U.Kolab	150	150	854.39mt	852.68mt	844 mtr	858 mtr.
U. Indravati	105	105	637.14mt	633.42mt	625mtr	642 mtr
MKD (O/D)	30	30	2733.50ft	2732.65ft	2685 ft.	2750 ft.
<b>TOTAL</b>	<b>490</b>	<b>490</b>				

**OHPC may deliberate & Members may discuss.**

**E.9: Operating procedure for Odisha System.**

As per provision in the Regulation 5.1(4) of Odisha Grid Code, the draft Operating Procedure for Odisha System has been prepared and uploaded in the SLDC site (path: Document ⇒ information). Members were requested and forward their comments / suggestions to SLDC before 15<sup>th</sup> December 2015. No comment has been received from Members except OHPC. It is again requested to forward comments on the said procedure. The final Operating Procedure shall be uploaded in SLDC site.

**Members may discuss.**

**E.10: Anticipated power generation and demand for the month of April'2016.**

Sl. No	Discom	Average	Peak
1	CESU	970	1200
2	WESCO	950	1200
3	NESCO	800	1000
4	SOUTHCO	400	550
5	OPEN ACCESS	200	200
<b>6</b>	<b>Total</b>	<b>3320</b>	<b>4150</b>

<b>Availability</b>			
1	Hydro	490	1300
2	State Thermal	750	750
3	IPP, small hydro &RE	800	800
4	ISGS share (including OA)	1000	1050
5	CGP support (OA)	280	250
6	Total availability	3320	4150
7	<b>Surplus / Deficit</b>	<b>0</b>	<b>0</b>

**Members may discuss.**

### **PART F: OTHER ISSUES**

**F.1: Date and Venue of the next (96<sup>th</sup>) PSOC meeting**